| L Number | Hits | Search Text | DB | Time stamp |
|---|---|---|---|---|
| 1 | 6 | (("5491604") or ("5914553") or ("6204737") or ("6316827") or ("6305779") or ("6167757")).PN. | USPAT; US-PGPUB | 2004/07/07 10:26 |
| 2 | 97241 | plating | USPAT; US-PGPUB | 2004/07/07 11:05 |
| 3 | 1009996 | vertical | USPAT; US-PGPUB | 2004/07/07 10:27 |
| 4 | 214791 | spacer | USPAT; US-PGPUB | 2004/07/07 10:27 |
| 5 | 28267 | mems | USPAT; US-PGPUB | 2004/07/07 10:27 |
| 6 | 173 | plating and vertical and spacer and mems | USPAT; US-PGPUB | 2004/07/07 10:42 |
| 7 | 80 | (plating and vertical and spacer and mems) and @ad<20010823 | USPAT; US-PGPUB | 2004/07/07 10:34 |
| 8 | 430 | plating and spacer and mems | USPAT; US-PGPUB | 2004/07/07 10:38 |
| 9 | 214 | (plating and spacer and mems) and @ad<20010823 | USPAT; US-PGPUB | 2004/07/07 10:39 |
| 10 | 134 | ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823) | USPAT; US-PGPUB | 2004/07/07 10:39 |
| 11 | 3841 | micromechanical | USPAT; US-PGPUB | 2004/07/07 10:38 |
| 12 | 83 | plating and spacer and micromechanical | USPAT; US-PGPUB | 2004/07/07 10:38 |
| 13 | 56 | (plating and spacer and micromechanical) and @ad<20010823 | USPAT; US-PGPUB | 2004/07/07 10:42 |
| 14 | 15 | ((plating and spacer and micromechanical) and @ad<20010823) not "19" not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823) | USPAT; US-PGPUB | 2004/07/07 10:42 |
| 15 | 17509 | sacrificial | USPAT; US-PGPUB | 2004/07/07 10:41 |
| 16 | 376 | plating and mems and sacrificial | USPAT; US-PGPUB | 2004/07/07 10:42 |
| 17 | 173 | (plating and mems and sacrificial) and @ad<20010823 | USPAT; US-PGPUB | 2004/07/07 11:06 |
| 18 | 15 | ((plating and spacer and micromechanical) and @ad<20010823) not "19" not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823) | USPAT; US-PGPUB | 2004/07/07 10:43 |
| 19 | 40 | ((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823) | USPAT; US-PGPUB | 2004/07/07 10:48 |
| 20 | 173 | ((plating and mems and sacrificial) and @ad<20010823) not (((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) | USPAT; US-PGPUB | 2004/07/07 10:48 |
| 21 | 129 | ((plating and mems and sacrificial) and @ad<20010823) not (((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823) | USPAT; US-PGPUB | 2004/07/07 11:07 |
| 22 | 31736 | resonator | USPAT; US-PGPUB | 2004/07/07 11:05 |
| 23 | 184443 | plating plated electroplating electroplated | USPAT; US-PGPUB | 2004/07/07 11:06 |

| 24 | 2930 | resonator and (plating plated electroplating electroplated ) | USPAT; US-PGPUB | 2004/07/07 11:29 |
|---|---|---|---|---|
| 25 | 125 | sacrificial and (resonator and (plating plated electroplating electroplated )) | USPAT; US-PGPUB | 2004/07/07 11:06 |
| 26 | 55 | (sacrificial and (resonator and (plating plated electroplating electroplated ))) and @ad<20010823 | USPAT; US-PGPUB | 2004/07/07 11:19 |
| 27 | 39 | ((sacrificial and (resonator and (plating plated electroplating electroplated ))) and @ad<20010823) not (((plating and mems and sacrificial) and @ad<20010823) not (((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and mems and sacrificial) and @ad<20010823) not (((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823 not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823) | USPAT; US-PGPUB | 2004/07/07 11:14 |
| 28 | 2204 | spacer and resonator | USPAT; US-PGPUB | 2004/07/07 11:18 |
| 29 | 112 | sacrificial and (spacer and resonator) | USPAT; US-PGPUB | 2004/07/07 11:14 |

| 30 | 97 | (sacrificial and (spacer and resonator)) not (((sacrificial and (resonator and (plating plated electroplating electroplated ))) and @ad<20010823) not ((((plating and mems and sacrificial) and @ad<20010823) not (((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and mems and sacrificial) and @ad<20010823) not (((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((sacrificial and (resonator and (plating plated electroplating electroplated ))) and @ad<20010823) not ((((plating and mems and sacrificial) and @ad<20010823) not (((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and mems and sacrificial) and @ad<20010823) not (((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823) | USPAT; US-PGPUB | 2004/07/07 11:19 |
| 31 | 534 | sacrificial and resonator | USPAT; US-PGPUB | 2004/07/07 11:18 |
| 32 | 337 | (sacrificial and resonator) and @ad<20010823 | USPAT; US-PGPUB | 2004/07/07 11:29 |

| 33 | 238 | ((sacrificial and resonator) and @ad<20010823) not ((sacrificial and (spacer and resonator)) not (((sacrificial and (resonator and (plating plated electroplating electroplated ))) and @ad<20010823) not (((plating and mems and sacrificial) and @ad<20010823) not (((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and mems and sacrificial) and @ad<20010823) not (((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((sacrificial and (resonator and (plating plated electroplating electroplated ))) and @ad<20010823) not (((plating and mems and sacrificial) and @ad<20010823) not (((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and mems and sacrificial) and @ad<20010823) not (((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not (sacrificial and (spacer and resonator)) not (((sacrificial and (resonator and (plating plated electroplating electroplated ))) and @ad<20010823) not (((plating and mems and sacrificial) and @ad<20010823) not (((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and mems and sacrificial) and @ad<20010823) not (((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((sacrificial and (resonator and (plating plated | USPAT; US-PGPUB | 2004/07/07 11:30 |

electroplating electroplated ))) and @ad<20010823) not (((plating and mems and sacrificial) and @ad<20010823) not (((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems)

| 34 | 387 | spacer and (resonator and (plating plated electroplating electroplated )) | USPAT; US-PGPUB | 2004/07/07 11:29 |
| 35 | 276 | (spacer and (resonator and (plating plated electroplating electroplated ))) and @ad<20010823 | USPAT; US-PGPUB | 2004/07/07 11:37 |

| 36 | 257 | ((spacer and (resonator and (plating plated electroplating electroplated ))) and @ad<20010823) not (((sacrificial and resonator) and @ad<20010823) not ((sacrificial and (spacer and resonator)) not (((sacrificial and (resonator and (plating plated electroplating electroplated ))) and @ad<20010823) not (((plating and mems and sacrificial) and @ad<20010823) not (((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and mems and sacrificial) and @ad<20010823) not (((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((sacrificial and (resonator and (plating plated electroplating electroplated ))) and @ad<20010823) not (((plating and mems and sacrificial) and @ad<20010823) not (((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and mems and sacrificial) and @ad<20010823) not (((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not (sacrificial and (spacer and resonator)) not (((sacrificial and (resonator and (plating plated electroplating electroplated ))) and @ad<20010823) not (((plating and mems and sacrificial) and @ad<20010823) not (((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and mems and sacrificial) and @ad<20010823) not (((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and | USPAT; US-PGPUB | 2004/07/07 11:37 |

Search History   7/7/04 12:... not ((sacrificial and (resonator and (plating plated
C:\APPS\east\workspaces\... electroplated ))) and @ad<20010823) not (((plating and mems
and sacrificial) and @ad<20010823) not (((plating and spacer and

| 37 | 8013 | mems and (plating plated electroplating electroplated ) | USPAT; US-PGPUB | 2004/07/07 11:37 |
|----|------|------------------------------------------------------------------------------------|------------------|------------------|
| 38 | 831 | mems and sacrificial and (plating plated electroplating electroplated ) | USPAT; US-PGPUB | 2004/07/07 11:37 |
| 39 | 443 | (mems and sacrificial and (plating plated electroplating electroplated )) and @ad<20010823 | USPAT; US-PGPUB | 2004/07/07 11:45 |

| 40 | 260 | ((mems and sacrificial and (plating plated electroplating electroplated )) and @ad<20010823) not (((spacer and (resonator and (plating plated electroplating electroplated ))) and @ad<20010823) not (((sacrificial and resonator) and @ad<20010823) not ((sacrificial and (spacer and resonator)) not (((sacrificial and (resonator and (plating plated electroplating electroplated ))) and @ad<20010823) not (((plating and mems and sacrificial) and @ad<20010823) not (((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and mems and sacrificial) and @ad<20010823) not (((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((sacrificial and (resonator and (plating plated electroplating electroplated ))) and @ad<20010823) not (((plating and mems and sacrificial) and @ad<20010823) not (((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and mems and sacrificial) and @ad<20010823) not (((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not (sacrificial and (spacer and resonator)) not (((sacrificial and (resonator and (plating plated electroplating electroplated ))) and @ad<20010823) not (((plating and mems and sacrificial) and @ad<20010823) not (((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and mems and sacrificial) and @ad<20010823) not (((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) | USPAT; US-PGPUB | 2004/07/07 11:45 |

and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((sacrificial and (resonator and (plating plated

| 41 | 5 | 438/48-53 | USPAT; US-PGPUB | 2004/07/07 11:44 |
|----|------|------------------------------------------------------------|-----------------|------------------|
| 42 | 1581 | (438/48-53).CCLS. | USPAT; US-PGPUB | 2004/07/07 11:44 |
| 43 | 228 | (plating plated electroplating electroplated ) and ((438/48-53).CCLS.) | USPAT; US-PGPUB | 2004/07/07 11:45 |

| 44 | 199 | ((plating plated electroplating electroplated ) and (((438/48-53).CCLS.)) not (((mems and sacrificial and (plating plated electroplating electroplated )) and @ad<20010823) not (((spacer and (resonator and (plating plated electroplating electroplated ))) and @ad<20010823) not (((sacrificial and resonator) and @ad<20010823) not ((sacrificial and (spacer and resonator)) not (((sacrificial and (resonator and (plating plated electroplating electroplated ))) and @ad<20010823) not (((plating and mems and sacrificial) and @ad<20010823) not (((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823)) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and mems and sacrificial) and @ad<20010823) not (((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((sacrificial and (resonator and (plating plated electroplating electroplated ))) and @ad<20010823) not (((plating and mems and sacrificial) and @ad<20010823) not (((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and mems and sacrificial) and @ad<20010823) not (((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not (sacrificial and (spacer and resonator)) not (((sacrificial and (resonator and (plating plated electroplating electroplated ))) and @ad<20010823) not (((plating and mems and sacrificial) and @ad<20010823) not (((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and mems and sacrificial) and @ad<20010823) not (((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and | USPAT; US-PGPUB | 2004/07/07 11:50 |

mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and

| 45 | 129 | (((plating plated electroplating electroplated ) and ((438/48-53).CCLS.)) not (((mems and sacrificial and (plating plated electroplating electroplated )) and @ad<20010823) not (((spacer and (resonator and (plating plated electroplating electroplated ))) and @ad<20010823) not (((sacrificial and resonator) and @ad<20010823) not ((sacrificial and (spacer and resonator)) not (((sacrificial and (resonator and (plating plated electroplating electroplated ))) and @ad<20010823) not (((plating and mems and sacrificial) and @ad<20010823) not (((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823 not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and micromechanical) and @ad<20010823 not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and mems and sacrificial) and @ad<20010823) not (((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823 not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and micromechanical) and @ad<20010823 not (((plating and spacer and mems) and @ad<20010823 not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((sacrificial and (resonator and (plating plated electroplating electroplated ))) and @ad<20010823 not (((plating and mems and sacrificial) and @ad<20010823) not (((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and mems and sacrificial) and @ad<20010823) not (((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823 not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and micromechanical) and @ad<20010823 not (((plating and spacer and | USPAT; US-PGPUB | 2004/07/07 11:50 |

mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and

| 46 | 123 | resonator and ((438/48-53).CCLS.) | USPAT; US-PGPUB | 2004/07/07 11:50 |
|---|---|---|---|---|
| 47 | 87 | (resonator and ((438/48-53).CCLS.)) and @ad<20010823 | USPAT; US-PGPUB | 2004/07/07 12:06 |

| 48 | 44 | ((resonator and ((438/48-53).CCLS.)) and @ad<20010823) not ((((plating plated electroplating electroplated ) and ((438/48-53).CCLS.)) not (((mems and sacrificial and (plating plated electroplating electroplated )) and @ad<20010823) not (((spacer and (resonator and (plating plated electroplating electroplated ))) and @ad<20010823) not (((sacrificial and resonator) and @ad<20010823) not ((sacrificial and (spacer and resonator)) not (((sacrificial and (resonator and (plating plated electroplating electroplated ))) and @ad<20010823) not (((plating and mems and sacrificial) and @ad<20010823) not (((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and micromechanical) and @ad<20010823) not ((((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and mems and sacrificial) and @ad<20010823) not (((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((sacrificial and (resonator and (plating plated electroplating electroplated ))) and @ad<20010823) not (((plating and mems and sacrificial) and @ad<20010823) not (((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not (sacrificial and (spacer and resonator)) not (((sacrificial and (resonator and (plating plated electroplating electroplated ))) and @ad<20010823) not (((plating and mems and sacrificial) and @ad<20010823) not (((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and mems and sacrificial) and @ad<20010823) not (((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer | USPAT; US-PGPUB | 2004/07/07 12:06 |

and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and

| 49 | 199 | spacer and ((438/48-53).CCLS.) | USPAT;<br>US-PGPUB | 2004/07/07 12:06 |
|----|-----|------------------------------------------------|--------------------|------------------|
| 50 | 133 | (spacer and ((438/48-53).CCLS.)) and @ad<20010823 | USPAT;<br>US-PGPUB | 2004/07/07 12:06 |

| 51 | 107 | ((spacer and ((438/48-53).CCLS.)) and @ad<20010823) not (((resonator and | USPAT; | 2004/07/07 12:07 |
|----|-----|----|----|----|
| | | ((438/48-53).CCLS.)) and @ad<20010823) not ((((plating plated | US-PGPUB | |

((spacer and ((438/48-53).CCLS.)) and @ad<20010823) not (((resonator and ((438/48-53).CCLS.)) and @ad<20010823) not ((((plating plated electroplating electroplated ) and ((438/48-53).CCLS.)) not (((mems and sacrificial and (plating plated electroplating electroplated )) and @ad<20010823) not (((spacer and (resonator and (plating plated electroplating electroplated ))) and @ad<20010823) not (((sacrificial and resonator) and @ad<20010823) not ((sacrificial and (spacer and resonator)) not (((sacrificial and (resonator and (plating plated electroplating electroplated ))) and @ad<20010823) not (((plating and mems and sacrificial) and @ad<20010823) not (((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and mems and sacrificial) and @ad<20010823) not (((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((sacrificial and (resonator and (plating plated electroplating electroplated ))) and @ad<20010823) not (((plating and mems and sacrificial) and @ad<20010823) not (((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and mems and sacrificial) and @ad<20010823) not (((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not (sacrificial and (spacer and resonator)) not (((sacrificial and (resonator and (plating plated electroplating electroplated ))) and @ad<20010823) not (((plating and mems and sacrificial) and @ad<20010823) not (((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and mems and sacrificial) and @ad<20010823) not (((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and mems) and @ad<20010823) not ((plating and

vertical and spacer and mems) and @ad<20010823)) not ((plating and spacer and micromechanical) and @ad<20010823) not (((plating and spacer and mems) and @ad<20010823) not ((plating and vertical and spacer and mems)